AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows.

Please replace the paragraph of the specification starting on line 23 of page 9, as originally filed, with the paragraph below, which is marked-up to show the changes therein:

Each of the mobile stations 20 through 24 ~~analyses~~ analyzes the first control signal received through the mobile station antennas to determine whether the first control signal transmitted from the base station 10 is correctly addressed thereto. The HS-DSCH signal reflects the second and third characteristics of <u>the</u> channels. The second characteristics show that the transmission of data through a channel is completed without channel switching because the length of a data frame, i.e., the unit of data transmission, is much shorter than the channel coherence time due to a general Doppler effect. The third characteristics are related to the non-continuous, burst transmission of data through a channel commonly owned by all of the mobile stations 20 through 24 belonging to the base station 10.

Please replace the paragraph of the specification starting on line 5 of page 13, as originally filed, with the paragraph below, which is marked-up to show the changes therein:

where $\mathbf{n}(k)$ denotes a noise component, and $\mathbf{U}(k)\sum(k)\,\mathbf{V}^H(k)$ means singular value decomposition (SVD), which is a kind of common matrix operation, using the first characteristics $\mathbf{H}(k)$, and $\mathbf{s}$ is ~~modelled~~ modeled as equation (6) below. SVD in multi-antenna systems is described in an article entitled "Fading Correlation and Its effect on the Capacity of Multielement Antenna Systems" by *Da-Shan Shiu, Gerard J. Foschini, Michael J. Gans,* and ~~*Josep*~~ *Joseph M. Kahn,* IEEE Transactions on Comm. Vol. 48, No. 3, 502-513, March 2003.